

REMARKS

The Applicants request reconsideration of the rejection.

Claims 1-13 remain pending.

The Examiner noted, on page 2 of the Office Action, that documents JP 2000-346842, JP 2002-117487, and JP 11-243997 were not considered because English-language translations of the documents were not provided. In reply, the Applicants note that JP 11-243997 is identified as "Patent literature 1" on page 2 of the present specification and as "Patent literature 2" on page 14 of the present specification, and discussed on pages 1 and 6 of the specification. Further, JP 2000-346842 and JP 2002-117487 are identified on page 14 of the present specification and discussed on page 6. Therefore, the requirement for a statement of relevancy is satisfied. In addition, for the Examiner's convenience, U.S. Patent No. 6,288,220 (corresponding to JP 11-243997) and WO 00/61198 (corresponding to JP 2000-346842) are being submitted herewith for the Examiner's additional consideration. The Applicants note that JP '487 is less relevant to the presently-claimed invention.

On page 2 of the Office Action, the Examiner objected to claim 7 as containing an informality that has been corrected by amendment above.

Claims 1-13 were rejected under 35 U.S.C. §112, second paragraph, as set forth on pages 3-4 of the Office Action. The claims have been amended to address the Examiner's concerns.

On page 4 of the Office Action, the Examiner indicated that "introducing means" and "position-control means" as set forth in claims 1 and 5-6 would not be treated under 35 U.S.C. §112, sixth paragraph because the specification was not found to provide the means for providing the functions recited in these claims. In

reply, the claims have been amended so as not to fall within the bounds of the sixth paragraph of §112, although the Applicants note that "position-control means", at least, is discussed in the specification (see page 3).

Claims 1 and 5 were rejected under 35 U.S.C. §102(b) as being anticipated by Cathcart et al., U.S. Patent No. 5,443,791 (Cathcart). The Applicants traverse as follows. Of note in independent claim 1 is the requirement that the magnetic micro-particle and the non-magnetic micro-particle be arranged in a given sequence within the vessel. Against this limitation, the Examiner cites Cathcart's DNA samples located in sample tubes floated to station 28. According to the Office Action, the DNA molecules are the non-magnetic particles.

However, column 17, lines 52-55 of Cathcart (cited by the Examiner) simply disclosed that the DNA sample tubes are loaded to the station so that the DNA template can be sequenced. The patent does not disclose that the DNA molecules are included in a given sequence. Indeed, Cathcart neither discloses nor suggests that both the magnetic micro-particle and the non-magnetic micro-particle of claim 1 are arranged in a given sequence. Therefore, claim 1 cannot be said to be anticipated by Cathcart.

Dependent claim 5 inherits the patentable features of claim 1, and thus is distinguishable from Cathcart on this ground as well.

Parenthetically, the Applicants note the comment on page 6 respecting a product claimed in product-by-process format. Respectfully, claim 1 is not set forth in product-by-process form, and thus should not be interpreted as suggested on claim 6 of the Office Action.

Claims 1-3, 5 and 10-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Edwards et al., U.S. Patent No. 5,306,619 (Edwards). Like Cathcart, however, Edwards does not disclose that the magnetic micro-particle and non-magnetic micro-particle are arranged in a given sequence within the vessel. The Office Action finds this feature in Edwards at col. 29, lines 30-32. However, this passage of Edwards sets forth that polystyrene beads are washed in a binding buffer and then used to capture certain oligonucleotides, followed by adding the beads to a binding reaction mixture containing a buffer and oligonucleotide. The patent does not disclose that adding the beads to the binding mixture provides a given sequence of a magnetic micro-particle and non-magnetic micro-particle as required by claim 1. Therefore, claim 1 is not anticipated by Edwards.

Similarly, micro-particle array kit claim 10, which recites that a magnetic micro-particle and non-magnetic micro-particle are arranged in a given sequence within a vessel is patentably distinguishable from Edwards. As well, each of the dependent claims 2-3, 5 and 11-13 are patentable at least as inheriting this patentable feature of the independent claims.

Claims 1-2 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over Edwards in view of Cathcart. Because neither Edwards nor Cathcart discloses the arrangement of the particles in the given sequence required by claim 1, their combination necessarily does not teach this feature of the invention.

Claims 1 and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Edwards in view of Lee et al., U.S. Patent No. 5,681,478 (Lee); and claims 1 and 7-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Edwards in view of Harrison et al., U.S. Patent No. 6,432,290 (Harrison). Because neither

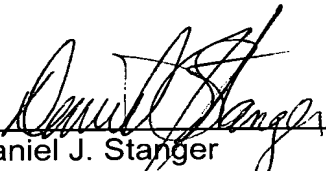
Lee nor Harrison discloses the feature wherein the magnetic micro-particle and non-magnetic micro-particle are arranged in a given sequence in the vessel, as required by claim 1, a combination of Edwards with either of these documents fails to render obvious the claimed invention.

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

To the extent necessary, the Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. H&A-126).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Daniel J. Stanger
Registration No. 32,846

DJS/sdb
(703) 684-1120